

# **COMBINED STORAGE APPARATUS**

## **BACKGROUND OF THE INVENTION**

### **(a) Field of the Invention**

The present invention is related to a combined storage  
5 apparatus, and more particularly to one that combines a case and  
a vacuum-sealed compression storage bag in a same structure.

### **(b) Description of the Prior Art:**

Vacuum-sealed compression storage bags generally available  
in the market for the storage of quilt or clothes due to the need to  
10 create more storage space in the house. In addition, quilts and  
clothes may get mildew or develop moldy smell during long-term  
storage in areas of high humidity and high temperature. Therefore,  
after winter season, all the quilts and clothes must be washed  
before use. Exposing it to sunlight can get rid of the smell and  
15 mildew but only if one is lucky enough to meet a clear sunny day.  
With the vacuum-sealed compression storage bag, woven products  
can be compressed for easy storage and significantly reduced  
storage space while preventing the chance of quilts and clothes  
from contacting the air and develop mildew or smell. If the use of  
20 quilt or cloth is required, simply open the compressed bag for  
immediate use. However, the stacking or storage of the  
compressed bags itself could become another problem since each  
bag is in irregular shape or size thus difficult to create a tidy stack  
in the storage room.

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## SUMMARY OF THE INVENTION

The primary purpose of the present invention is to provide a combined storage apparatus comprised of a vacuum-sealed compression storage bag and a case. The compression bag is build  
5 into the case to solve or ease the storage problem of the compressed storage bags. With a case, it permits more organized placement by stacking-up multiple units in the corner or in the closet. Relatively, to adapt to more convenient use of the present  
10 invention, the case is made foldable for space saving, considering the possibility that the entire combined storage apparatus may not be used. Furthermore, a baseboard is provided to the bottom of the vacuum-sealed compression storage bag to create a flat square shape thus able to place flush in the case bottom for optimal use  
15 of the space available.

To achieve the purpose, the present invention is comprised of a vacuum-sealed compression storage bag and a case. The bag has an open end provided with two sealing zipper strips attached. An air suction outlet is disposed on one side of the compression bag  
20 and a board is provided on the outer peripheral of the bottom of the bag. The case is also integrated with a foldable lid when the case is not in use. Quilts or clothes is folded and put into the vacuum-sealed compression storage bag and then the bag with the baseboard is placed into the case for easy and tidier storage.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

Fig. 1 is an expanded view of a preferred embodiment of the present invention.

Fig. 2 is a perspective view showing that a case of the preferred embodiment of the present invention can be folded in for storage.

Fig. 3 is another expanded view of the preferred embodiment of the present invention.

Fig. 4 is a perspective view showing that a vacuum-sealed compression storage bag with a board is placed into the case of the preferred embodiment of the present invention.

Fig. 5 is a sectional view showing an open end of the vacuum-sealed compression storage bag of the preferred embodiment of the present invention.

Fig. 6 is a sectional view showing the preferred embodiment of the present invention after the vacuum-sealed bag is compressed and placed in the case.

## **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

The present invention relates to a combined storage apparatus including a vacuum-sealed compression storage bag 1 and a case 2. The compression storage bag 1 preferably made of plastic material to yield elasticity and foldable properties. The compression bag 10 has an open end 11 adapted with a doubled-stripped sealing lines 12; an air suction outlet 13 adapted with an air suction valve 14 as illustrated in Fig. 1, or a suction

nozzle 14' having an airtight closing section 141' as illustrated in Fig. 3 provided on one side of the bag 10; and a board 15 connected to the external peripheral of the bottom of the bag 10. The case 2 includes a case body 21 integrated with a lid 27, preferably made of harder material such as an inner paperboard or its equivalent and an outer fabric or its equivalent. Two folding lines 24, 25 are respectively provided at the middle of the left side and the right side 22, 23 of the case body 21; and the base 26 of the case body 21 is made of soft material, preferably a single layer fabric or its equivalent for easy folding and attachment to the peripheral of the bottom of the case 2.

Accordingly, as illustrated in Fig. 2, the case 2 when not used can be folded in. A handle 20 is each provided to four sides of the case body 21 and the handle 20 is also made foldable. One edge 28 of the lid 27 is attached to the case body 21 while the remaining three edges are each provided with a foldable lip 29. Two bails 30 are respectively provided on both ends of the front lip 29 of the lid 27 and one socket is each provided on one end of both side lips 29 at where close to the relative bail for all three lips to be attached to one another to facilitate folding. The bails 30 and the sockets may be provided in the form of a magic tape or its equivalent. Furthermore, as illustrated in Fig. 5, a slider C-clamp 16 is adapted to the sealing line 12 provided at the open end 11 of the bag 10 to achieve faster and secured sealing of the zipper 10. When the object to be stored is placed into the vacuum-sealed compression storage bag 1, the bag 1 is then placed into the case 2 as illustrated in Figs. 4 and 6 to able to achieve a nice and tidy

stack of multiple cases 2.

The case integrated with the lid containing the vacuum-sealed compression storage bag of the present invention provides excellent utility as illustrated in Fig. 4. Wherein, a first piece of a quilt 3 is placed in the vacuum-sealed compression storage bag 1, and then the compression bag 1 with the baseboard 15 is placed into the case 2. A head 4 from a vacuum unit is coupled to the suction nozzle 14' disposed at the air suction outlet 13 as illustrated in Fig. 3 or to the air suction valve 14 as illustrated in Fig. 1 to draw the air out of the bag 10 to reduced from its previous state as illustrated by the dotted line reduced to that as illustrated by the solid line for the quilt 3 to be stored exactly and completely in the case. The case 2 is then covered up with the lid 27 as illustrated in Fig. 6. Multiple cases 2 can be stacked up in a nice and tidy fashion. The baseboard 15 is provided to the base of the bag 10 can be firmly settled at the bottom of the case 2 to provide good support to maintain the case shape. The purpose is allow user to fully fill up the interior of the case, the base board 15 is a must because it expand the compression bag to allow easier placement or usage when storing quilts or clothes; thereby the baseboard 15 makes the bag to position correctly before use, and fully demonstrates the characteristics of the present invention in conjunction of the function of positioning after the bag is used.

Furthermore, both of the lid and the case of the present invention are foldable and portable for saving space when not used during different seasons. By providing excellent utility and storage, the present invention discloses a storage mechanism that

is completely different from the prior art.

Specification of the preferred embodiment and the accompanying drawings to the present invention given above are by no means to restrict the teaching of the present invention. It  
5 is to be noted that any changed and/or similar structure to that of the present invention based on the teaching of the present invention shall be included in those claims to be claimed in the present invention.